Regulatory Commission of Alaska Docket R-065 Reply Comments by Peter McKay

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Docket # R-06-5 - Reply Comments

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Commissioners.

In my review of comments submitted in response to the order I am left with the impression that responding Alaska utilities vigorously oppose most of the proposed "New Standards" of EPAct of 2005 but will accept interconnect standards.

It is unfortunate that only one comment on the experiences from New Jersey was received – and zero response from the other state commissions. I respectfully suggest that it is the RCA's responsibility to contact other state Commissions to ask for their reports, experiences and opinion on compliance with the EPAct of 2005 (and general net metering/interconnection experiences). It is possible that other state commissions may have reports to state legislatures about program success/failures available to share etc.

Unfortunately - I also conclude that the public is not engaged in this issue.

# **Comments on Specific New Standards:**

Sec 1251 (11) NET METERING

Personal comments - Peter McKay:

Of the five (5) changes, Number 1, the Net Metering standard is the most concise and offers the least wiggle room. In clear unambiguous terms the first sentence states that "Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves".

If I am an electric consumer who has an eligible on-site generating facility I may then deliver this energy to the local utility distribution system. This energy "may be used to offset electric energy provide by the electric utility to the electric consumer during the applicable billing period". The standard is clear that energy generated by consumers with eligible on-site generating facilities "offset(s)" energy provided by the utility. This is "retail" — or the price that the consumer would pay if consuming the electrical energy. The consumer/generator may utilize his own generated electricity and thus buy less "retail energy" from the utility.

What is undefined in the Net Metering paragraph is the rate at which a consumer with an eligible on-site generating facility will be compensated for an energy "surplus".

The surplus may be:

- 1. Momentary when the consumer/generator utilizes less energy than is generated and the meter spins backwards. I support a single bi-directional meter with a single "retail" rate for energy flowing in either direction. I also believe that this was the intent of the Standard.
- 2. "Net" At the end of the applicable billing period when the net result of the billing period indicate a net surplus of customer/generated electrical energy. I support a credit, or the ability to bank the energy for another month when there may not be a surplus.

## The comments of Chugach Electric Association, Inc.:

"Chugach does not oppose the concept of paying customers who put energy into the system...provided the customer is paid the utility's avoided cost of generation". Later the company also indicates that the consumer should also pay for the added cost of metering as well as the avoided cost of generation.

I do not agree with paying the consumer/generator "wholesale" for energy surplus to what is purchased from the utility. I also do not feel that additional metering is warranted. Asking the customer/generator to pay an additional service/meter charge presents an obstacle to small customer/generators interconnection.

### The comments of (Anchorage) Municipal Light and Power (M.L.&P).:

M.L.&P. poses four (4) questions involving the three (3) purposes from Chapter 46 of the act - (1) conservation of energy supplied by energy utilities; (2) the optimization of the efficiency of use of facilities and resources by electric utilities; and (3) equitable rates to electric consumers - and organizes their comments around this. The EPAct of 2005 has been written and enacted and seems clearly aligned with the three (3) purposes of the act.

M.L.&P. states that "Net metering effectively requires utilities to purchase from their customers the lowest quality energy ever transacted between utilities.... At today's costs, this amounts to requiring the utilities to purchase power for between three and five times what it is worth". Actually the energy placed on the grid by consumer/generators has several benefits. The UL/IEEE approved inverters only allow "high quality" energy to be placed on the grid. These inverters have a very narrow window for power quality export (for voltage, frequency and power factor). Distributed Generation can also benefit system stability by providing end-of-line support. For some customers in some distant neighborhoods net metering may improve the power quality. M.L.&P. states that defects in Net Metering that "can be corrected by offering net metering only in separate rate schedules designed to recover the costs imposed by self generators". They propose accomplishing this with a "combination of customer charge and demand charge". M.L.&P. also suggests "separating the customer's relationships with the utility into a conventional all requirements retail electric service and a small power purchase by the utility" - at the utilities avoided cost for nonfirm energy (which I think is a sub-wholesale rate). What M.L&P. proposes should not be confused with net metering.

These proposed rate rates/schedules are not customer/generator friendly and create obstacles to the growth of renewable energy sources and distributed generation.

### The comments of Kemppel, Huffman and Ellis for the Alaska Power Association:

A.P.A. (initial) (1) Net Metering comments reflect my understanding of Net Metering – They state (a) "that it is generally provided by a single meter" and (b) that the meter rolls both forward and backwards, and that (c) "Therefore, net metering necessarily requires the utility to purchase power from a retail customer at a price that is equal to the utility's fully allocated rate for the sale of retail electrical service to the customer, even though the incremental cost of generation that the utility avoids is much lower".

A.P.A states "the fundamental problem with this is that it forces the utility to purchase power above its avoided cost".

I feel that the utility should pay full retail price for surplus electricity placed on the grid by consumer/generators. Mr. Rose of the Network for New Energy Choices addressed the issue of consumer/generators being only paid avoided cost for surplus energy placed on the grid – On page 14 he states "Without paying for any additional infrastructure investment (whose cost is spread among all ratepayers), the utility is simply commandeering the excess energy generated by net metered customers, selling it to non-net metered customers and pocketing the profit". A.P.A. states "Another issue... is the increased cost of metering equipment and program administration". I think these costs are overstated. I advocate a bi-directional single meter for small consumer/generators and the same billing arrangement as is currently used. No net impact.

A.P.A. states "Finally, implementation of the net metering standard would not reduce overall energy consumption or cost." I disagree. I think a look at the big picture would show that some of the overall energy consumed would be generated by a renewable resource and thus would

have the effect of reducing the fossil fuel consumed by electric utilities. If a significant percentage of electric energy consumed is generated with renewable resources the net cost to consumers will also be reduced.

## The comments of Central Electric Inc.:

Central Electric Inc's objection to the EPAct is primarily financial – and is understandable. Changes to existing operating modes are expensive – but necessary. The additional expenses for updating equipment and human capabilities must be funded. "Additional financial resources and technical expertise" must be provided with changes in regulations.

I completely agree with and support "a state-wide effort to do alternative energy planning and implement net metering and smart metering with state funded resources is possible".

## The comment of James Rose - Network for New Energy Choices (N.N.E.C.):

I find these comments very relevant. One section (page 4) that I find interesting are the strength of the New Jersey Renewable Energy Task Force led by the President of the state's utility commission that kept it's focus the goal of allowing small-scale renewable energy to compete equally with conventional power. Several rulings did not favor utilities – but were aligned with the stated goals.

I also agree that "net metering alone is not sufficient to offset the high initial cost associated with on-site renewable energy generation. NJ adopted incentives and I believe Alaska should do the same

Streamlined application process – this is very important to encourage renewable consumer/generators to participate. 20 days for a permit application. Great! Simplified interconnect standards are critical. Utilizing IEEE and UL-1741 standards to prequalify components is a way to ensure that interconnects are standardized and safe. Reduced unnecessary safety requirements – also removes another common utility barrier that cannot be justified. (In my case Homer Electric Association already has a main breaker at the meter/pole that can be opened, and the cover locked out. What is the purpose to having another lockable disconnect switch?)

I strongly support the draft N.N.E.C.'s draft model "Net Metering Statute" provided at the end of Mr. Rose's comments. It is a very good starting point for Alaska regulations.

I look forward to the N.N.E.C. statewide net metering programs report due in November.

#### Sec 1251 (12) FUEL SOURCES

<u>Fuel Source diversity</u>: Many rural areas of the state are suitable for large scale wind or hydropower installations. These should be examined as a means to supplement the single fuel source currently used. It would be irresponsible to not consider and plan for their use.

## Sec 1251 (13) FOSSIL FUEL GENERATION EFFICIENCY

<u>Fossil Fuel Generation Efficiency:</u> Many rural generators are diesel units that could use a whole bunch of increased efficiency. A 10 year plan should be submitted by all utilities to map their way forward toward goals of increased use of renewable energy.

## Sec 1252 SMART METERING

<u>Smart Metering:</u> This may merit inquiry as well. Several customers may be able to adjust peak loads. Billing agreements to help manage peak loads seem like a win-win situation. This may allow utilities to reduced spinning reserves and improve machine loading.

## Sec 1254 (15) INTERCONNECTION

Interconnection: This is a standard that utilities should embrace. A single unified standard will help utilities, electricians, inspectors, municipalities and homeowners.

The development and implementation of this standard would seem to be one of the core functions of the R.C.A.

Standardized interconnections will improve the quality of distributed generation installations as well as the safety of utility workers.

#### Conclusions

We are at an important crossroads in how Alaska proceeds with EPAct. The Commission has the opportunity to encourage consumer/generators and promote the development of an alternative energy business in the State. The Commission also has the opportunity to discourage progress by choosing to side with the interests of utilities. As Mr. Rose stated on page 13 "In many states the regulatory barriers established at the behest of utilities have effectively thwarted the original intentions of the net metering programs". I hope that this will not happen in Alaska and that the Commission will act in the best interest of consumers.

I believe the commission should open at least two (2) individual inquiries concerning net metering and Interconnection. I believe these inquiries will lead to creating two dockets concerning these issues, for consideration. It is my hope that this will lead to the creation of reasonable standards for Alaskans and their electric utilities to comply with the EPAct of 2005.

I believe that a significant statewide outreach program should be implemented to educate and involve the public in what EPAct of 2005 can mean to Alaska. The commission should develop a comprehensive new energy strategy that includes financial incentives to promote and expand renewable energy in the state.

Few pioneers will initially follow thru to put electrical energy generated by renewable resources on the grid when net metering is enacted. Those few consumer/generators should be encouraged and nurtured until a viable base is established. The commission should consider funding pilot systems for each utility to demonstrate the technology and to serve as a model.

In my opinion implementing net metering and a statewide interconnect standard will have a tiny impact on the utilities. I'm not sure why so much energy is spent opposing the change in the status quo. Really - only a few customers will buy a few Kw less. The impact will be sort of like a big national energy saving program to turn off a light when you leave a room, or change incandescent lamps to compact fluorescent bulbs. It will not affect utility profitability.